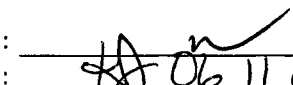
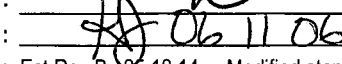


SHIP JAN 10

Dart Aerospace Ltd.

Date: Monday, 11/6/2006 1:30:40 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : AFT MAINTENACE STEP
Job Number : 29291	
Estimate Number : 12455	
P.O. Number : N/A	Part Number : D350591133
This Issue : 11/6/2006 S.O. No. : N/A	Drawing Number : D2946 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : LARGE FAB ASSY	Drawing Revision : REV. B
Previous Run : 27953	Material : N/A
Written By : 	Due Date : 11/27/2006 Qty: 10 Um: Each
Checked & Approved By : 	
Comment : Est Rev:B 06.10.14 Modified step 10 KJ/EC Est Rev:B 06.07.19 D2946 @ rev.b EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
----------------	------------------------------	----------------------

1.0	DC	DOCUMENT CONTROL
-----	----	------------------

**Comment:** DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-133 CHG002

KS 06.11.07

(10)

2.0	D2622120C	Extrusion
-----	-----------	-----------

**Comment:** Qty.: 0.5000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

.500 D2622-120C Extrusion B28215

FF 07-01-04

10

3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
-----	-------------	------------------------------

**Comment:** LARGE FABRICATION RESOURCE 1

1-Cut D2622-120 extrusion to 62.06" long as per Dwg D2946

2-Deburr

Ensure that 57.09" minimum extrusion is kept and identify to be used for D350-591-215/-216.

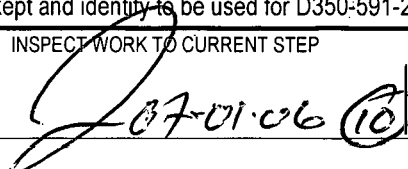
FF 07-01-04

10

FF 07-01-04

10

4.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------

**Comment:** INSPECT WORK TO CURRENT STEP

5.0	D2734	206 Step Endplate
-----	-------	-------------------

**Comment:** Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty Part Number Description Batch

FF 07-01-06

10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/6/2006 1:30:40 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AFT MAINTENACE STEP

Job Number: 29291

Part Number: D350591133

Job Number:



Seq. #:

Machine Or Operation:

Description :

2 D2734

End Plate *329340*

P.E. 07.01.06

6.0

D2944

Step Mounting Plate



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D2944 Support

327971 = 2
329351 = 18

P.E. 07.01.06

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Deburr and Bevel ends for welding

2-Weld (1) End Cap and (2) Lugs using Jig DT8440 as per Dwg D2946

A/R Aluminum Rod *M100A37*
M19612

3-Grind End Cap welds flush

P.E. 07.01.06

P.E. 07.01.06

P.E. 07.01.08

8.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

11/07/01/08 (10)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

11/07/01/08 (10)

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

M-G / a.m 07/01/08

(10)

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

P.E. 07.01.09

10

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/6/2006 1:30:40 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AFT MAINTENACE STEP

Job Number: 29291

Part Number: D350591133

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Remove alodine prior to welding. Weld end cap as per Dwg D2946. Grind end cap weld flush.

A/R AL ROD BATCH: M100237 M19612

PL 07-01-09 10

13.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

07/01/09 (10)

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/01/09 (10)

15.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Touch Up Chemical conversion

PL

07/01/09 X10

16.0

POWDER COATING

POWDER COATING



M102391



(10X)

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M-R/a.m 07/01/09

17.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D2946 and QSI 005 4.4

a.m 07/01/09 (10X)

18.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: Inspect Powder Coat and Wing Walk

PL 07/01/10 (10)

19.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/6/2006 1:30:40 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AFT MAINTENACE STEP

Job Number: 29291

Part Number: D350591133

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

D22301

Mounting Lug



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Mounting Lug

Batch: B28902 ✓

21.0

D22303

Mounting Lug



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Mounting Lug

Batch: B29646 ✓

22.0

D2856400

Abrasion Strip



Comment: Qty.: 1.2606 f(s)/Unit Total : 12.6063 f(s)

Abrasion Strip 7.20" long x2

Batch: B29288 ✓

23.0

D2945

Step Mounting Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Step Mounting Plate

Batch: B24352 2X B29914 3X ✓

24.0

AN47A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Bolt

Batch: M100327 ✓

25.0

AN411A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Bolt

Batch: M100243 ✓

26.0

AN414A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 80.0000 Each(s)

Bolt

Batch: M100188 ✓

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: FD Date: 07/01/10
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/6/2006 1:30:41 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AFT MAINTENACE STEP

Job Number: 29291

Part Number: D350591133

Job Number:



Seq. #:

Machine Or Operation:

Description :

27.0

.AN960JD416

Washer



Comment: Qty.: 14.0000 Each(s)/Unit Total: 140.0000 Each(s)

Washer

Batch: M101938 ✓

28.0

MS21042L4

Nut



Comment: Qty.: 14.0000 Each(s)/Unit Total: 140.0000 Each(s)

Nut

Batch: M19188 ✓

29.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

C207101110 (10)

30.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-213

Location: _____

PPP Rev: D

PC 7/01/10 (10)

31.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07/01/10 (10)

Job Completion



U 07-01-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

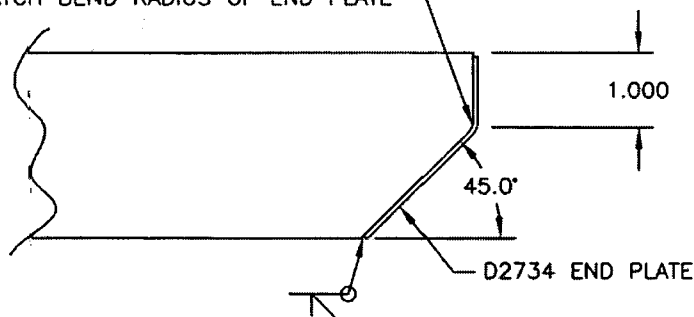
D2946 STEP ASSEMBLY PARTS LIST

Part No.	Description	QTY
D2946	Step Assembly	X
D2622-63	STEP EXTRUSION*	1
D2734	END PLATE	2
D2944	STEP MOUNTING PLATE	2

*cut per drawing

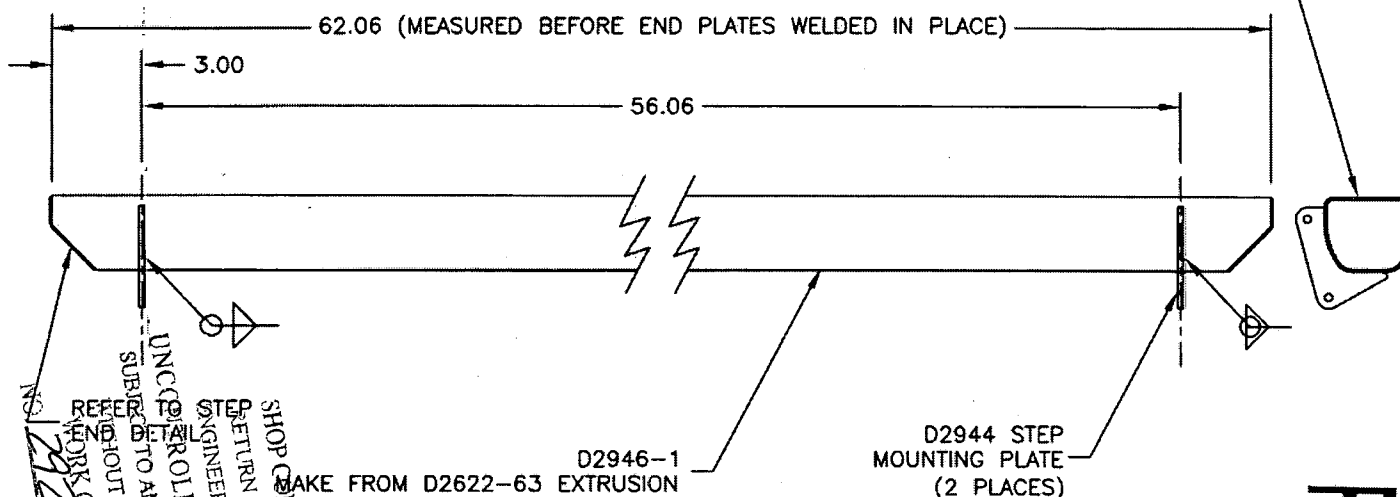
NOTE: ALL WELDS SHALL BE
100% VISUALLY
INSPECTED BY A
QUALIFIED INSPECTOR
PER DART QSI 004

ROUND CORNER OF EXTRUSION TO
MATCH BEND RADIUS OF END PLATE



TYPICAL STEP END DETAIL
NOT TO SCALE

APPLY BLACK ANTI-SKID
ON TOP SURFACE TO
BOTTOM OF TOP RADIUS



D2946-041 STEP ASSEMBLY

D2946 STEP ASSEMBLY

- 1) MAKE FROM D2622 STEP EXTRUSION
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ENTIRE ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

DESIGN	CP	DRAWN BY	PH	DART AEROSPACE LTD
CHECKED		APPROVED		HAWKESBURY, ONTARIO, CANADA
DATE	05.11.14	TITLE	D2946	REV. B
		STEP ASSEMBLY		SHEET 1 OF 1
				SCALE
				1:6
A	99.12.13	NEW ISSUE		
B	05.11.14	UPDATE FINISHING NOTE		

RELEASED
05.11.28